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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,149

03/07/2006

John Moyes

42478-0001

4366

25213 7590 09/16/2009
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EXAMINER

RUMP, RICHARD M

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

09/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,149	Applicant(s) MOYES ET AL.	
	Examiner Richard M. Rump	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

Claims 1-18 are pending and presented for examination. Claims 19-39 were cancelled via amendment dated 9 July 2009.

Claim Rejections - 35 USC §§ 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-7, 9-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent No. 5487819 to Everett.

Regarding claims 1-2, 7, 9-10, Everett discloses a method of recovering a precious metal (gold, silver, etc.) from a sulfuric material comprising a leaching step wherein a mixture of halides (bromide & chloride) are solubilized with a precious metal which is separated from the oxidized sulfidic material. (claim 1; column 1, lines 9-18, column 10, lines 14-71; column 14, lines 26-27; figure 5). Arsenic can be precipitated out (column 7, lines 25-27). While the oxidation potentials are not expressly stated, it is

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obvious if not inherent that the properly allow one to recover gold using this process that the oxidation potential limitations must be met (As oxidation potential control is mentioned. column 2, lines 32-41). Note that the conditions are not specified either.

Regarding claims 3 & 6, the metal is recovered (column 10, line 58). This is done before recycling of the sulfidic material (column 16, lines 58-60).

Regarding claim 4, activated carbon is utilized (*Id.*)

Claims 5, 8 & 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everett.

Regarding claim 5, while the usage of cyanide to aid in gold extraction is not expressly stated, a skilled artisan would find cyanide an obvious expedient as it is commonly used within the gold extraction arts to aid in efficient gold extraction.

Regarding claim 8, these are obvious as routine optimization of concentration/parameters to achieve the desired effects (In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)). ie in order to control the rate of oxidation.

Regarding claims 11-12, pyrite can be the sulfidic material (column 6, line 9). While example 1 is drawn to chalcopyrite, given the similarities of the materials a skilled artisan would find the same method obvious to perform. The same holds true for arsenopyrite, etc. Simultaneous recovery and solubilization is performed (*Id.*).

Regarding claims 13-14, in the hydrometallurgical arts the usage of Pourbaix reactions (control of Eh-pH) is commonly performed by skilled artisans in order to control the type and amount of materials leached out in order to not leach out any unwanted species. The temperature condition is met as per the *supra* 102 rejection's

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rationale. Furthermore, the general conditions of 60 to 110°C (Specifically 60 as discussed *supra*) are disclosed and this overlaps the claimed range, as such a *prima facie* case of obviousness exists (See MPEP 2144.05).

Regarding claims 15-16, given the above disclosure it would be obvious to perform the separate and recycling of the ferric sulfate.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everett in view of Swinkels.

Regarding claim 5, Everett is silent to the usage of cyanide species to aid in separation. However, Swinkels suggests the usage of cyanide in the aqueous or solid separation (recovery) stage. It would have been obvious to one having an ordinary level of skill in the art at the time of invention to perform the recover with activated carbon of Everett in view of the addition of cyanide of Swinkels. The teaching or suggested motivation in doing so is that cyanide aids in the extraction process by extracting up to 90% of the gold. Furthermore in event of *arguendo*, cyanide is a well known addition to any gold extraction process as such a skilled artisan would first attempt its usage absent evidence to the contrary.

Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everett as applied to claim 1 above, and further in view of Adams, “Characterization and Blinding of Carbonaceous Preg-Robbers in Gold Ores” (Provided by Applicant).

Regarding claims 17 & 18, Everett is silent as to the usage of a surfactant to remove any extra carbon, also Everett is silent as to the carbon content of the ore

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however there would be some carbon content and given the indefiniteness of 'high carbon' as stated above, the Examiner is construing this to be any level of carbon which inherently the ore would have. Given cyanide's poisonous nature, it would be obvious to a skilled artisan after complexing it with gold to safely remove it from the carbonaceous filter material. Commonly, kerosene or other hydrocarbons are used for this depending on its ionicity, water solubility, molecular weight, etc. Adams which details with removing gold from a pyretic ore discloses the usage of numerous surfactants, including kerosene to assist in the removal of gold from carbonaceous filters (Pages 3-5). It would have been obvious to a skilled artisan to perform the process of Everett with the usage of a surfactant, such as kerosene in view of Adams as the process of Adams is traditionally done (Page 6, second paragraph of Adams).

Response to Arguments

Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Claims 1-18 stand rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Rump whose telephone number is (571) 270-5848. The examiner can normally be reached on Monday through Friday 7:00 AM-4:30 PM (-5 GMT).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (571)272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. M. R./
Examiner, Art Unit 1793

/Stuart Hendrickson/
Primary Examiner, Art Unit 1793